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Patent claims

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1. A method of transferring liquid substances, in particular flavoring agents, to a cigarette group (11), corresponding to the contents of a cigarette pack (10), prior to the group being packaged, characterized in that the substance(s) is/are fed to the cigarettes (12) downstream of a cigarette store, in particular downstream of a cigarette magazine (15), during the preferably continuous transportation of the cigarette group (11) by a cigarette conveyer (17) with pockets (20) for a respective cigarette group (11), or during a standstill phase of the cyclically transported cigarette groups (11).
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2. The method as claimed in claim 1, characterized in that a plurality of cigarette groups (11) which follow one after the other in the transporting direction are fed the substances or flavoring agents simultaneously, in particular during the standstill of a pocket chain (17) with a plurality of successive pockets (20) with a respective cigarette group (11), the pockets being charged with substances simultaneously.
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3. The method as claimed in claim 1 or 2, characterized in that as an alternative, or in addition, the substance(s) is/are applied to packaging material during the packaging process, in particular to an inner side of an inner wrapper (25) enclosing the cigarette group (11).
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4. The method as claimed in claim 1 or one of the further claims, characterized in that the substance(s) is/are introduced into gaps (33) between adjacent cigarettes (12) of a cigarette group (11) prior to a wrapper being applied.

5. An apparatus for transferring liquid substances, in particular flavoring agents, to cigarettes (12) of a cigarette group (11), corresponding to the contents of a cigarette pack (10), characterized by the following features:

- a) the cigarette groups (11) can be transported one after the other by an endless cigarette conveyer with pockets (20) for a respective cigarette group (11), in particular by a pocket chain (17),
- b) the cigarettes (12) of the cigarette groups (11) are arranged in the pockets (20) transversely to the conveying direction such that free end surfaces of the cigarettes (12) are directed sideways,
- c) arranged alongside the movement path of the cigarette conveyer is at least one stationary or movable flavoring subassembly (28) with at least one metering unit (29) for transferring the substance(s) or the flavoring agents to at least one cigarette group (11) as the positions of the metering unit (29) and cigarette group (11) relative to one another momentarily coincide.

6. The apparatus for transferring liquid substances, in particular flavoring agents to cigarettes (12) characterized in that cigarettes (12) which are formed into a cigarette group (11) corresponding to the contents of a cigarette pack (10) can be transported by a cigarette conveyer, in particular by a pocket chain (17) or by a (folding) turret (21), and in that the cigarette conveyer is assigned a fixed or movable flavoring subassembly (28) which has at least one metering unit (29) and transfers the substance directly or indirectly to the cigarettes (12) during a momentary standstill, or during the conveying movement, of the cigarette group (11).

7. The apparatus as claimed in claim 6, characterized

in that, with the cigarette conveyer being driven cyclically, in particular with the cigarette groups (11) being transported by a pocket chain (17) with a cyclically moving conveying strand (18), a stationary  
5 flavoring subassembly (28) is arranged alongside the moving path of the cigarette conveyer such that, during the standstill of the cigarette conveyer, one or more metering units (29) arranged one beside the other is/are positioned opposite a respective cigarette group  
10 (11), namely opposite the in particular filter-free ends of the cigarettes (12), and such that, also during the standstill, substance can be transferred from the metering unit (29) to the adjacent cigarette group (11).

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8. The apparatus as claimed in claim 7, characterized in that in the case of a pocket chain (17) which can be moved cyclically by the distance of four pockets (20) in each case, the flavoring subassembly (28) has four  
20 metering units (29) located one beside the other in accordance with the spacing between the pockets (20).

9. The apparatus as claimed in claim 6 or one of the further claims, characterized in that the metering unit  
25 (29) has at least one nozzle head (31) for discharging a determinable portion (30) of the substance which is to be transferred, it being possible for the portion (30) to be transferred in a contact-free manner, namely in free flight, to the cigarette group (11) or the  
30 cigarettes (12) or by means of an introduction mechanism, in particular an introduction needle (32), in contact with the cigarette group (11) or individual cigarettes (12).

35 10. The apparatus as claimed in claim 9 or one of the further claims, characterized in that the introduction needle (32) can be introduced (centrally) into a cigarette (12) of the cigarette group (11) or into a gap (33) formed between adjacent cigarettes (12) of a

cigarette group (11), it being possible, for the purpose of transferring a determinable quantity of substance, to select individual cigarettes (12) and/or individual gaps (33) for the operation of feeding the substance.

11. The apparatus as claimed in claim 6 or one of the further claims, characterized in that a substance or a portion (30) of the same can be transferred to a packaging blank for the cigarette group (11) during the packaging process, in particular to a folding tab of an inner wrapper (25) which directly encloses the cigarette group (11).

12. The apparatus as claimed in claim 11 or one of the further claims, characterized in that the substance or the portion (30) can be transferred to the inside of an exposed folding tab - longitudinal tab (42) - of a base wall (26) of the inner wrapper (25) prior to the folding tab being folded.

13. The apparatus as claimed in claim 11 or one of the further claims, characterized in that the substance can be transferred by a metering unit (29), by a metering unit (29) which is positioned in a stationary manner alongside the movement path of the inner wrapper (25), as the blank, in particular the inner wrapper (25), is transported by a folding turret (21), the metering unit (29) or nozzle head (31) for discharging the portion (30) being directed obliquely, or at an angle, in relation to the folding tab - longitudinal tab (42).

14. The apparatus as claimed in claim 12 or one of the further claims, characterized in that a plurality of, in particular, two, portions (30) which follow one after another in the conveying direction can be transferred to the folding tab or longitudinal tab (42), in particular in a region outside that which is covered over by other folding tabs.